

REVISIONS			
REV	DESCRIPTION	DATE	APP
A	ORIGINAL RELEASE PER DDR	11/02/05	ADG

GENERAL NOTES:

1. THE MODEL PA2001 SHOULD BE PLACED IN A CONVENIENT LOCATION THAT MAINTAINS ACCESS TO THE UNIT SHOULD REPAIRS OR READJUSTMENT BE REQUIRED. THE SENSOR SHOULD NOT BE LOCATED MORE THAN 100 FEET FROM THE PA2001 PREAMPLIFIER. IT IS RECOMMENDED THAT THE PA2001 BE INSTALLED ON OR NEAR THE SENSOR TO ASSURE OPTIMUM PERFORMANCE.
2. CONNECTIONS TO THE TERMINAL BLOCK SHOULD BE CAREFULLY DRESSED TO AVOID HAVING BARE WIRES EXTEND PASS THE SCREW CLAMP ON THE TERMINAL BLOCK. THIS IS PARTICULARLY IMPORTANT WHEN THE PC CARD IS MOUNTED WITHIN AN EXPLOSION PROOF ENCLOSURE. WIRES SHOULD BE NEATLY DRESSED NEAR BOTTOM OF ENCLOSURE TO PREVENT PROBLEMS WHEN COVER IS INSTALLED.
3. FOR COMPLIANCE WITH EMI/RFI REQUIREMENTS THE PRE-AMPLIFIER MUST BE INSTALLED IN A METAL ENCLOSURE SUCH AS A SUITABLE NEMA 4 (E.G. GUAC) JUNCTION BOX. THE ENCLOSURE MUST BE PROPERLY GROUNDED AND A GROUNDING STRAP IS REQUIRED FROM THE ENCLOSURE TO THE POWER SUPPLY COMMON (PIN 2).
4. THE CABLE ENTRY REQUIRES 360° GROUNDING COVERAGE TO THE ENCLOSURE CASE. THIS IS OBTAINED BY USING TWISTED PAIR WITH FULL BRAID CABLE AND A CABLE FITTING THAT PROVIDES A METAL TO METAL CABLE CLAMPING CONNECTION. THE INSULATION OF THE CABLES SHOULD BE STRIPPED BACK TO ALLOW FOR CONNECTION TO THE TERMINAL BLOCK AND ALLOW FOR THE CABLE FITTING TO CLAMP ONTO THE BRAIDED SHIELD. ANY OPEN AREAS SHOULD THEN BE COVERED USING FOIL TAPE.
5. IN HAZARDOUS LOCATIONS WHERE METAL CONDUIT IS USED, 360° GROUNDING IS ACHIEVED. ALL CABLE SHIELDS SHOULD BE TERMINATED TO THE ENCLOSURE-GROUNDING STUD.

MATERIAL	APPROVALS		<p><i>MOTION SENSORS INC.</i> ELIZABETH CITY, NC 27909</p>	
NONE	DRAWN D.GUYDAN	DATE 10/28/05		
FINISH	CHECK J.DEFEO	11/02/05	TITLE	
NONE	ISSUED M.BERGMAN	11/02/05	INSTALLATION DRAWING PA2001 PRE-AMPLIFIER	
CONFIDENTIAL PROPERTY OF MOTION SENSORS, INC. (MSI) NOT TO BE DISCLOSED TO OTHERS, REPRODUCED, OR USED FOR ANY OTHER PURPOSE, EXCEPT AS AUTHORIZED IN WRITING BY MSI. MUST BE RETURNED ON DEMAND.	DIMENSION UNITS UOS	INCH	MM	INCH [MM]
	DEFAULT TOLERANCES SHALL BE AS INDICATED BELOW UNLESS OTHERWISE SPECIFIED (UOS): 1 PLACE DECIMAL ±.015 2 PLACE DECIMAL ±.01 3 PLACE DECIMAL ±.005 FRACTIONAL ±1/64 ANGULAR ±1/2°			
SIZE	CAGE CODE	DWG NO	REV	
A	OY2U4	ST-A-1556	A	
SCALE	NONE		SHEET	1 OF 2

NOTES (REFER TO FIGURE 1):

1. SET SOLDER BRIDGE JP2 AND JP3 (SEE FIGURE 2) TO THE DESIRED SENSORS TYPE (MAG OR RF) POSITION.
2. CONFIGURE SOLDER BRIDGE JP1 (SEE FIGURE 2) TO THE DESIRED PULSE OUTPUT AS FOLLOWS:

<u>PULSE OUTPUT TYPE</u>	<u>JP1 JUMPER CONFIGURATION</u>
OPEN COLLECTOR	POSITION 2
SQUARE WAVE TO V_{in}	POSITION 1 AND 2
TTL/CMOS	POSITION 1, 2 AND 4
0-10 VDC SQUARE WAVE	POSITION 1, 2 AND 3

3. COIL SELECTION – TWO (2) SOLDER BRIDGE JUMPERS THAT ARE USED TO SELECT THE DESIRED SENSOR COIL TYPE TO BE USED AS INPUT:

<u>INPUT COIL TYPE</u>	<u>JP2 SETTING</u>	<u>JP3 SETTING</u>
RF	POSITION 2	POSITION 1 AND 2
MAGNETIC	POSITION 1	POSITION 3 AND 4

4. PULSE SELECTION – A FOUR (4) SOLDER BRIDGE JUMPERS THAT ARE USED TO SELECT THE DESIRED TYPE OF PULSE OUTPUT:

<u>PULSE OUTPUT TYPE</u>	<u>JP1 SETTING</u>
OPEN COLLECTOR	POSITION 2
SQ WAVE TO V_{in}	POSITION 1 AND 2
TTL/CMOS	POSITION 1, 2 AND 4
0-10VDC SQ WAVE	POSITION 1, 2 AND 3

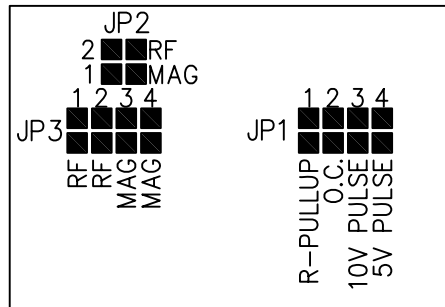


FIGURE 2

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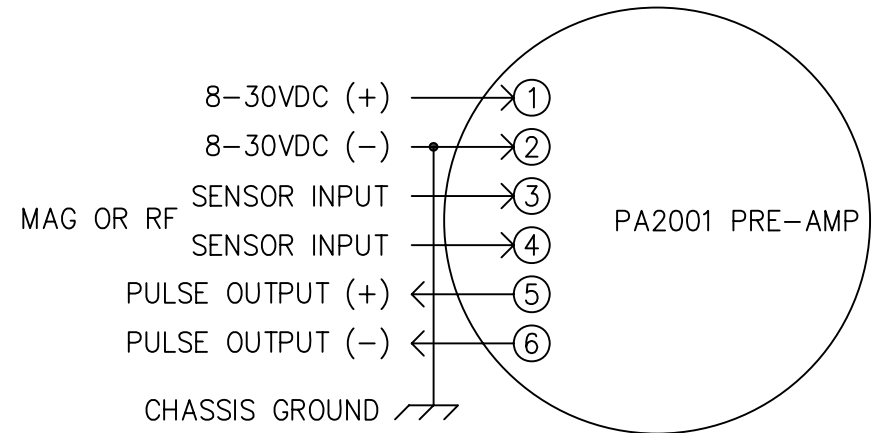


FIGURE 1

CONTROLS AND ADJUSTMENTS

MATERIAL	APPROVALS		MOTION SENSORS INC. ELIZABETH CITY, NC 27909													
NONE	DRAWN D.GUYDAN	DATE 10/28/05	TITLE INSTALLATION DRAWING PA2001 PRE-AMPLIFIER													
FINISH	CHECK J.DEFEO	11/02/05														
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ANGULAR	±1/2°															
SIZE	CAGE CODE A OY2U4	DWG NO ST-A-1556	REV A													
SCALE	NONE	SHEET	2 OF 2													